

USAWC STRATEGY RESEARCH PROJECT

EVOLUTION OF MARITIME STRATEGY...IS SEA POWER 21 THE ANSWER?

by

COMMANDER STEVEN M. BENNER
UNITED STATES NAVY

CAPTAIN STEVEN W. NERHEIM
Project Advisor

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U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

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Alfred Thayer Mahan is credited with convincing the United States Government that maritime power could be used to achieve strategic goals and attain major power status. Mahan's concepts have continued to shape United States maritime strategy, albeit to a varying degree, since they were first accepted. Maritime strategy has played a key role in the political framework of the United States as the nation evolved from a coastal, to an oceanic, to a trans-oceanic power. This paper provides a definition of maritime strategy and briefly analyzes modern American maritime strategies based on the concepts provided by Alfred Thayer Mahan, with emphasis on the vision presented in "Sea Power 21." The United States Navy enjoys a position of unrivaled maritime dominance in the post-Cold War world and the basis for developing national strategy has shifted from a potential threat to maintaining specified military capabilities. This changed focus complicates the process of defining the means requisite to a maritime strategy and opens the question, does "Sea Power 21" adequately rationalize the ends, ways, and means required for an effective maritime strategy?

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EVOLUTION OF MARITIME STRATEGY...IS SEA POWER 21 THE ANSWER?

INTRODUCTION:

Alfred Thayer Mahan is credited with convincing the United States government that the key to achieving its strategic goals is through the influence of “Sea Power.” Mahan’s definition of “Sea Power” involved six broad strategic elements including: “Geographical Position, Physical Conformation, Extent of Territory, Number of Population, National Character, and Character of the Government.”¹ The basic principles of Mahan’s maritime strategy were instrumental in the evolution of the United States Navy and shaped its operations across two World Wars, the Cold War, and violent peace of the Twentieth Century. Having achieved dominance at sea, the United States Navy is now focused upon expanding its role in directly affecting events ashore as a component of a joint warfare force.

The terms maritime strategy and naval strategy have been variously defined throughout modern history. Sir Julian Corbett, writing in 1911, defined maritime strategy as “the principles which govern a war in which the sea is a substantial factor. Naval strategy is but that part of it which determines the movements of the fleet when maritime strategy has determined what part the fleet must play in relation to the action of land forces.”² In 1986, Admiral James D. Watkins, USN, stated: “The goal of the overall maritime strategy is to use maritime power, in conjunction with the efforts of our sister services and forces of our allies, to bring about war termination on favorable terms.”³ For the purpose of this paper, I will focus on a more basic, but timeless, definition of naval strategy proved by Mahan, which states: “...in war the common sense of some, and the genius of others, sees and properly applies means to ends; and naval strategy, like naval tactics, when boiled down, is simply the proper use of means to attain ends.”⁴

Following the Cold War, the basis for the development of United States naval strategy shifted from focusing on a specific potential threat to maintaining the capabilities to deal with a specified range of contingencies. This changed focus in strategy provides additional challenges in defining the resources necessary to support the desired effects. This paper will highlight the effects of this shift in focus on modern maritime strategies, with an emphasis on “Sea Power 21.”

MAHAN’S INFLUENCE ON STRATEGY

Mahan influenced the way America viewed maritime strategy by highlighting the importance of a powerful navy in international strategy. Mahan contended that “the key to naval supremacy lay with the ship of the line, and mastery of the sea would fall to the nation whose battlefleet could defeat its opposite numbers.”⁵ He maintained that becoming a world power

required mastery of the seas, which would equate to hegemony in an island nation. According to Sullivan, Mahan “educated both the Navy and the American people on the use of diplomacy, military force and warfare on a global scale when isolationism still ruled the foreign policy formulated along the Potomac.”⁶

Given the historic success achieved by Great Britain, primarily through a powerful navy, Mahan postulated that the United States could do the same thing. His basic premise that naval power can be applied to achieve national strategic goals or to gain national preeminence has survived the test of time. Mahan contended that national influence can be projected through dominant naval forces to provide for power projection (primarily against enemy fleets), afford the security of harbors, and to maintain sea lines of communication. National influence and power were best achieved through control of the seas by friendly forces, and denial of the seas to the enemy.

In considering issues for the development of a maritime strategy, Mahan employed the following questions: “The proper function of the navy in the war; its true objective; the establishment of depots of coal and supplies; the maintenance of communications between these depots and the home base; the military value of commerce-destroying as a decisive or secondary operation of the war; the system upon which commerce-destroying can be most efficiently conducted, whether by scattered cruisers or by holding in force some vital center through which commercial shipping must pass.”⁷ Mahan’s questions relate directly to ends, ways, and means. Ends are defined as “what military (or other political and social) conditions must be produced in the operational area to achieve the strategic goal.”⁸ Ways are defined as “what sequence of actions is most likely to produce that condition.”⁹ And means are “how resources should be applied to accomplish that sequence of actions.”¹⁰ Risks must also be evaluated to determine the likely results of the actions. These terms will be used to evaluate the efficacy of modern maritime strategies employed by the United States

MARITIME STRATEGY IN THE WORLD WARS

Participation in the World Wars would not have been practical at a decisive level without the significant influence afforded by the Navy. In World War I, and the European Theater in World War II, sea power was “trans-oceanic” in nature, because transporting troops and supplies was the primary strategic focus of the Navy, and sea transport was the only viable option. With the emergence of an effective enemy submarine threat, protection of convoys became a significant mission for the allied naval forces.

The Pacific Theater in World War II was fought as an “oceanic” campaign, where victory was achieved through amphibious operations to gain control of strategic bases, significant naval battles to destroy the Japanese Navy, naval interdiction of Japanese sea lines of communication, isolation of the home Islands, and preparations to invade if necessary.

Maritime strategy during the World Wars was linked to the national and allied strategy of total war, and the Second World War’s end state was the destruction of axis forces on a global scale. The means of naval war were provided by an unprecedented industrial surge in the United States to manufacture war-fighting equipment. The means were applied through naval battles and a succession of amphibious operations, transport of equipment and supplies, and protection of sea lines of communication. The naval strategy was decisively successful largely because the axis powers, particularly the Japanese, were unable to recover from losses while the United States rebuilt and expanded its force, was able to exploit the maritime maneuver space, control the tempo of operations and take the fight to the enemy along multiple lines of operations.

COLD WAR MARITIME STRATEGY

Immediately following World War II, a debate emerged concerning the need for a Navy, particularly aircraft carriers. The Army Air Forces argued that their new, long range, United States based aircraft with nuclear weapons could replace the aircraft carrier strike capability. Many believed that the next war would be against the Soviet Union with no need for amphibious operations, and that the Navy would play a supporting role. In addition, there was a strong argument that future wars would quickly escalate to a nuclear conflict and that large conventional forces were no longer needed. These arguments were used to justify a significant reduction in naval forces pending the development of a post war military strategy. “As far as Congress was concerned, the United States had command of the seas and was in no danger of losing it.”¹¹ In 1947, Vice Admiral Forrest Sherman created a maritime strategy based on the notion that the next war would look much like the last one. For force structure, “he kept carriers at the core of his planning and proposed that they be given the option of delivering conventional or atomic weapons.”¹²

The Korean War supported Sherman’s belief that conventional wars remained a threat, and the Navy was employed as an integral part of a balanced military force. North Korea had a small Navy, so control of the seas was not a major factor and the United States Navy conducted carrier strike operations throughout the war. Sea control also allowed the United States Navy to

move troops and supply friendly forces. In fact, "six of every seven men who landed in Korea came by sea."¹³ The ratio of sea to air transport of freight into the theater was 270 to 1.

As the Soviet Union became a more significant threat, the maritime strategy for the bipolar Cold War world required significant naval power to project the national influence of the United States. "The NATO alliance prepared for the struggle for control of the sea and containment of the Soviet Navy...as well as the ability to protect sea lines of communication for extended periods."¹⁴ As an instrument of national strategy, the Navy played a vital role in the Cold War, particularly through forward presence and power projection.

Maritime strategy was focused on a large Navy, equipped for optimum power projection against the enemy (primarily the Soviet Union) and capable of sea control, sea denial, and maintaining the sea lines of communication. Navy ballistic missile submarines also provided one leg of the nuclear deterrent triad in the event of nuclear warfare against the Soviet Union. Regional events including the Vietnam War further confirmed that the Navy required a strategy to handle contingencies across the spectrum of conflict. By the mid 1960's, Navy procurement programs were developed almost exclusively against the emerging Soviet Navy. Maintaining the resources to counter the Soviet threat was a significant factor in naval strategy, with an emphasis on high cost systems such as nuclear carriers and surface ships. The high cost of these systems, however, restricted the quantity produced and was leading to an imbalanced fleet. At the time, the Navy was building the Nimitz Class nuclear aircraft carrier, the large Spruance Class destroyer, and was planning to build very expensive nuclear powered frigates as carrier escorts.

In 1971, ADM Zumwalt, then Chief of Naval Operations, proposed a procurement strategy to improve force structure called "High-Low." The intent of Zumwalt's plan was to balance the expensive ships and weapons systems with more moderate cost systems. Zumwalt accepted short term risk in decommissioning older platforms in order to free resources for the purchase of a more balanced fleet. In Zumwalt's view, "an all-low Navy would not have the capability to meet certain kinds of threats or perform certain kinds of missions. In order to have both enough ships and good enough ships there had to be a mix of High and Low."¹⁵ Zumwalt's efforts resulted in cancellation of the plan to procure nuclear powered frigates and replaced them with the construction of more economical conventionally powered frigates. Zumwalt also reduced the number of expensive ships constructed in order to fund procurement of new ship classes including the hydrofoil patrol craft, a small carrier called the "sea control ship", and a "surface effect ship" which was a high speed transport ship to carry troops and equipment across the ocean rapidly, then serve as a helicopter or vertical launch aircraft platform. Two of the four

procurement programs, the frigate and the hydrofoil patrol craft, were funded and constructed. A version Zumwalt's high speed transport remains a procurement priority in "Sea Power 21." The "high-low" concept remains an important aspect in balancing the cost of high end Navy ships and systems with efficiently conducting naval operations, particularly in missions such as presence, maritime interdiction, or convoy screening, which require large numbers of ships with moderate capabilities.

As the Soviet Union continued to develop a formidable naval threat, maintaining a sound maritime strategy became increasingly important. In 1977, ADM Thomas B. Hayward, then Commander in Chief United States Pacific Fleet, developed "Sea Strike, a strategy that envisioned a carrier task group offensive against Soviet Far Eastern bases in the event of war."¹⁶ Hayward's strategy assumed an offensive bias and called for the "integration of the other services and the nation's allies"¹⁷ into a theater strategy.

Details of United States maritime strategy were made available in an unclassified 1986 publication called "The Maritime Strategy." "The Maritime Strategy" (and the concurrently emerging Army "AirLand Battle Doctrine") provided a more offensive strategy for the nation in support of the National Military Strategy. "The Maritime Strategy" was comprehensive, based on existing capabilities, linked to National Military Strategy, and developed as a "vehicle for shaping and disseminating a professional consensus on warfighting where it matters-at sea."¹⁸

"The Maritime Strategy" provided a convincing overview of world events to highlight the necessity to support forward defense, alliance solidarity, and deterrence. It also emphasized emerging issues such as state sponsored terrorism and the proliferation of weapons of mass destruction. A real strength of "The Maritime Strategy" was a detailed overview of the Navy's role in peacetime presence, crisis response, and warfighting. This overview, coupled with a meticulous description of how maritime forces would be used at each phase of war against the Soviet Union, clearly defined the ends, and articulated the case for a larger Navy (means). A new naval force structure was developed based upon the threat posed by a large, Soviet conventional and nuclear capable naval force at sea. This threat was derived primarily from the observed numbers and perceived capabilities of the Soviet fleet. The renewed military emphasis and plan for an increase in force structure "was presented as part of the Reagan Administration's defense build-up...calling for the expansion (of the Navy) to 600 ships."¹⁹

"The Maritime Strategy" included an offensive framework to defeat the Soviets both in blue water and in the littorals, with both carrier and amphibious task forces. The Navy was structured to fight large scale blue water naval battles, either conventional or nuclear, against a Soviet force of nearly equal size. Carrier battle groups and Amphibious Ready Groups would

have been employed to defeat the Soviet Navy, strike their supporting infrastructure, and to support amphibious operations to “retake conquered territory and to seize key objectives in the Soviet rear.”²⁰ The Navy also maintained a significant nuclear arsenal to serve as a deterrent to the Soviet Union. “The revamped United States military doctrine of the 1980’s restored the primacy of combat engagements and decisive military victory to American Military Strategy...The Pentagon heralded the official arrival of this doctrine, generally known as overwhelming force.”²¹

The massive expense of maintaining the military forces necessary to counter the United States forces was too much for the fragile Soviet economy, contributing to its collapse and a change in the balance of world military power. Thus, the most recent arms race culminated in the end of the Cold War, and the United States emerged as the lone superpower by 1990. The decisive battle of the Cold War was only incidentally military and achieved the economic defeat of the enemy.

“The Maritime Strategy,” the most fully articulated modern maritime strategy, met Mahan’s strategic criteria for addressing ends, ways and means. The roles of the Navy in the national strategy for war were listed and explained in detail against the most significant threat. Operational command and control of forces, control of the seas in the area of operations, denial of the seas to the enemy, and required forces to achieve victory within acceptable risks were clearly defined and the required force of 600 ships was developed.

POST COLD WAR MARITIME STRATEGY

Following the Cold War, the emphasis of the Navy shifted from sea control “to assure political stability on the economically vibrant rimlands of *inter alia*, Europe and Pacific Asia, thereby ensuring access to consequent world markets.”²² Strategists were faced with an entirely new world order and believed they had to re-define the mission, capabilities and requirements to operate in this dimension.

The end of the Cold War could also be characterized as the re-ignition of many small-scale, regional conflicts. The fall of the Soviet Empire and dramatic shifting of power was reflected in many regions throughout the world. The United States as the sole superpower was duty-bound to influence the new world order.

The Gulf War tested existing United States military strategies against a vastly different threat than the Soviet Union. For the Navy, “Operation Desert Storm was a wake-up call.”²³ In this war the forces demonstrated an unparalleled capability to win decisively, but there were areas that needed improvement, primarily in joint warfare. The confined areas of operation, and

the need to conduct overlapping and supporting missions between services proved very challenging, primarily due to the incompatibility of command and control systems. As a result, joint warfare in the Gulf War in some respects proved to be more de-confliction than synchronization. The means procured to conduct joint warfare as envisioned in "The Maritime Strategy" were unequal to the command and control requirements for modern joint and combined operations. The Gulf War illustrated that United States military services needed to develop more compatible systems and procedures to more effectively synchronize operations.

NAVAL STRATEGY IN A CHANGED WORLD

In 1992, the Chief of Naval Operations published "...From the Sea," a strategy to incorporate the requirements of the new world order. This new strategy maintained Mahan's timeless theory that national policy was best influenced by a powerful navy, emphasizing "strategic deterrence and defense, forward presence, crisis response, and reconstitution."²⁴ The focus of "...From the Sea" reflected a shift from one global threat to a multiple regional threats. As expected, based on the challenges identified with joint warfare during the Gulf War, "...From the Sea" called for a "far greater emphasis on joint and combined operations."²⁵ This strategy provided an employment concept using existing forces and capabilities to more effectively operate in the littoral regions. It provided an overview of expected operating environments and mission requirements, and described the force structure and organizational changes necessary to accomplish them. "...From the Sea" required retaining dominance at sea, while expanding the maritime role in joint operations and increasing the integration of expeditionary naval forces in land warfare while stressing the continuing need for sea-based forcible entry. The strategic framework of "...From the Sea" provided a concept of capitalizing forces to meet national needs and tailoring and task organizing them to respond with more flexibility to crises.

"Forward...From the Sea" was published in 1996 as an expansion of the concepts in "...From the Sea." It restated the requirement to fight and win wars and maintain "strategic deterrence, sea control, maritime supremacy, and strategic sealift."²⁶ In addition, it developed the concept that "the most important role of naval forces in situations short of war is to be engaged in forward areas, with the objectives of preventing conflicts and controlling crises."²⁷ Peacetime forward presence, interoperability, and engagement were developed and added to the existing maritime strategy. "Forward...From the Sea" required naval forces to incorporate "the ability to operate in concert with friendly and allied forces--so that in the future we can easily participate fully as part of a formal multinational response or as part of a coalition."²⁸

The littoral focus in naval warfare required a corresponding emphasis on expeditionary forces to maintain forward presence. ARG and embarked Marine Air Ground Task Forces were configured and positioned to provide regional influence complementing the CVBG. The ARG ostensibly had the potential to respond to lesser regional conflicts which did not require the full firepower of the CVBG.

Evaluating the efficacy of "...From the Sea" and "Forward...From the Sea" using the criteria established by Mahan reveals that they were less comprehensive strategies than "The Maritime Strategy." The roles of the Navy were outlined in general terms and the ends were presented more as envisioned tasks and functions than as a clear end state based on a perceived threat. The ways were well developed by laying out the operational and organizational framework for employment of forces. The means required to support "...From the Sea" and "Forward...From the Sea" were not well defined because of the shift to a capabilities based force determination. As a result, these strategies could be categorized to as vision statements with no clearly articulated ends other than procurement of naval forces.

MODERN NAVAL STRATEGY

The September 11, 2001 terrorist attacks against the United States demonstrated the profound dangers of the modern world. The asymmetric terrorist threat provided a renewed emphasis for military evolution to counter "nations poised for conflict in key regions, widely dispersed and well-funded terrorist and criminal organizations and failed states that deliver only despair to people."²⁹ To accomplish this, President George W. Bush stated that the United States would "transform our military to ensure our ability to conduct rapid and precise operations to achieve decisive results."³⁰

This approach was described in the Joint Operations Concept as "more on how the United States can defeat a broad array of capabilities that any adversary may employ rather than who the adversaries are and where they may threaten joint forces or US interests. The joint force will have attributes to make it fully integrated, expeditionary in nature, networked, decentralized, adaptable, able to achieve decision superiority, and lethal."³¹ This approach sounds very much like the vision in "...From the Sea" and "Forward...From the Sea."

The National Security Strategy employed by President Bush is known as "decisive action" and involves the use of preemption if necessary to prevent attacks against the United States. "Decisive action envisions a strategy, force structure, and military personnel system that take advantage of the technological advances that give the American military the capability of being

stealthier, more lethal, able to strike from longer ranges, more agile, more survivable, and able to operate without huge logistical trains or vulnerable bases near the conflict.”³²

“Sea Power 21,” provides the current vision for future United States naval operations in an information dominated battle space, and focuses on the development of concepts and technologies to maintain military dominance. It is intended as a continuation in the evolution of the two earlier post Cold War maritime strategies with a fundamentally future focus. To counter the increased asymmetric risk to the nation, the strategy advocates that the “Navy must expand striking power, achieve information dominance, and develop transformational ways of fulfilling our enduring missions of sea control, power projection, strategic deterrence, strategic sealift, and forward presence.”³³

“Sea Power 21” provides a naval strategy addressing future challenges with three concepts: “Sea Shield, Sea Strike, and Sea Basing.”³⁴ These three concepts are an integral part of a joint military strategy that integrates modern technology to engage the enemy with precision in any location on short notice. Additionally, this strategy enhances naval integration with combined, joint and multinational forces.

When fully developed, “Sea Shield” will provide a defensive shield that “takes us beyond unit and task-force defense to provide the nation with sea-based theater and strategic defense.”³⁵ The concept is designed around the joint and combined efforts of national, multinational, and civil agencies working together with shared information. “Sea Shield” is future-technology dependent and is focused on the detection, tracking, interception and neutralization of threats before they reach the United States. Moreover, the envisioned “shield” will have a much greater capability to extend over land in support of expeditionary ground forces. Key technologies for sea shield include theater missile defense, sea-based unmanned vehicles, enhanced self defense capabilities, improved mine countermeasures, and an improved network for a better common operating picture between forces.³⁶

“Sea Strike” is the offensive arm of “Sea Power 21,” and is designed to project combat power against an adversary in a decisive and persistent manner. It is a joint and integrated combat strategy designed and tailored for effects based warfare. “Information gathering and management are at the heart of this revolution in striking power. Networked, long-dwell naval sensors will be integrated with national and joint systems to penetrate all types of cover and weather, assembling vast amounts of information...to tailor joint strike packages that deliver calibrated effects at precise times and places.”³⁷ The focus of “Sea Strike” is to enhance precision striking power from naval assets in support of joint forces. Enhanced striking power is achieved through joint, interagency and allied information exchange, made possible through

improved sensors which are networked to provide increased situational awareness at all levels. New technologies such as hypersonic missiles, electro-magnetic rail guns and hyper-spectral imaging systems are being pursued to enhance strike capability.

“Sea Basing” is a concept designed to compensate for the increasing dispersion of forces in contingency operations and the difficulties of basing forces in foreign countries. This concept is intended to provide the ability for the Navy to project expeditionary warfare power without reliance on shore infrastructure. “Sea Basing” will also provide the Joint Forces Commander with a self-sustaining sovereign command and control post in an afloat unit. Developing this concept will require enhanced networking capabilities and the infrastructure to support an at sea Joint Task Force Commander’s Headquarters. “Sea Basing” also requires the nearly complete transformation of maritime sealift and prepositioned forces to enable greater operational capabilities from the sea. Key technologies required for sea basing include: “Heavy equipment transfer capabilities, intra-theater high-speed sealift, and improved vertical delivery methods.”³⁸ Sea Basing will reduce the vulnerabilities inherent in expeditionary warfare and is a priority for both the Navy and Marine Corps in the evolution of littoral warfare capabilities.

FORCE STRUCTURE IN SEA POWER 21

Force structure for “Sea Power 21” is designed to accommodate the need for simultaneous, dispersed operations. The Aircraft Carrier Strike Group (CSG) has been reduced in size from the previous CVBG model to free surface ship and submarine assets for Expeditionary Strike Groups (ESG). The addition of screening units such as destroyers, frigates, and submarines will increase the ESG’s capability to operate independently of the CSG. The strategy retains the CSG as the “core of our Navy’s war fighting strength”³⁹ while advancing the ESG to “prosecute Sea Strike missions in lesser-threat environments”⁴⁰ where significant sea-based fixed wing air support is not required. The force also includes Surface Action Groups (SAG), which are small groups of cruisers and destroyers employed for surface warfare missions.

“Sea Power 21” envisions a Global Concept of Operations employing “a fleet of approximately 375 ships...12 Carrier Strike Groups and 12 Expeditionary Strike Groups...This dispersed, netted and operationally agile fleet, as part of the joint force, will deliver the combat power needed to sustain the homeland defense, provide forward deterrence in four theaters, swiftly defeat two aggressors at the same time, and deliver decisive victory in one of those conflicts.”⁴¹ Unfortunately, the justification for increasing the Navy to a 375 ship fleet is not effectively articulated in “Sea Power 21.” Current shipbuilding rates will not support this concept

of operations, and indeed will not maintain even the present naval force against end of service life decommissionings.

“Sea Power 21” relies primarily on expensive, specialized, high performance ships and systems at the expense of quantity in more moderately priced ships that would provide greater depth and presence. Based on the low threat to United States naval forces in the open ocean today the Navy has accepted risk by decommissioning older destroyers and frigates to fund the development of the systems described in “Sea Power 21.” This calls to question the ability of the Navy to maintain the capability to conduct both blue water and littoral warfare, which requires a balance of high performance and lower cost ships to cover the many required functions. This situation appears to be very similar to the challenge faced by ADM Zumwalt in maintaining a “High-Low” balance of forces.

The underlying theory for “Sea Power 21” is the premise that the United States will retain dominant maritime power and intelligence, and leverage the capabilities of the joint forces to allow the lightly populated expeditionary forces to operate freely. Through increased technological capabilities, the smaller forces will retain the ability to defend against air, surface, and subsurface threats. This premise implies that naval forces are not expected to achieve dominance at sea alone, but will rely on superior information and joint force support to operate freely and achieve desired effects to maintain sea superiority.

Future technologies are a key feature in achieving the effects envisioned in “Sea Power 21.” In order to maintain a strategic advantage including air, land, and sea superiority with a smaller more dispersed force, the Joint Forces Commander will require near real time battle damage assessment and actionable intelligence. Without the situational awareness provided by accurate and instantaneous operational information, the envisioned systems will not achieve their potential.

By separating the ESG from, and equating it to the CSG, “Sea Power 21” purports to effectively double the number of strike groups available for contingency response operations. If the situation dictates a more robust force, CSG, ESG, and SAG will be combined to form an Expeditionary Strike Force to provide the necessary effects.

“Sea Power 21” conceptualizes gaining the desired effects previously achieved by the massing of forces by leveraging the intelligence, information, maritime dominance, and precision strike capabilities provided by a more capable force. “Sea Power 21” is linked to a larger, joint strategy designed to combine the effects of all forces to produce the required capabilities. The strategy envisions the Air Force and Army fully participating with maritime forces from bases throughout the world, relying on a common operating picture and fully

integrated tactical data exchange system. Unfortunately, "Sea Power 21" only develops the naval aspects of this concept and does not link them to the necessary complimentary efforts from the other services.

IS "SEA POWER 21" THE ANSWER?

"Sea Power 21" provides a vision for the future naval forces evolution required to maintain dominance. It is aligned with the national military strategy and structures the Navy to support the requirement to maintain national defense, provide forward presence in four regions, swiftly defeat the efforts of two aggressors, and win decisively in one of the conflicts (known as 1-4-2-1). Just as were "...From the Sea" and "Forward...From the Sea," it is a capabilities based strategy designed against a non-defined threat. The visionary aspect of the strategy and future focus, however, do not provide as detailed a description of the forces required to support the concepts as did "The Maritime Strategy."

"Sea Power 21" is effective in identifying and developing the roles and functions of the Navy and aligning them with national military strategic goals. The means, however, are not sufficiently developed and the justification is not provided to support the claim that the Navy requires a force of 375 ships. In addition the strategy claims to be jointly focused, but it does not articulate Navy plans to accomplish joint integration with the Army or Air Force, with the exception of the provision of a command and control platform for the Joint Forces Commander. The strategy also falls short of sufficiently addressing the necessity for overlapping military capabilities commensurate with fighting deeper over land.

HOW TO IMPROVE "SEA POWER 21"

The advantage of "The Maritime Strategy" above the other strategies described in this paper was its development of ends, ways, and means. Using a well defined threat is more conducive to achieving this, but it can also be accomplished from a capabilities standpoint. Using the 1-4-2-1 requirement from the National Military Strategy, the Navy's standard rotational deployment scheme, and estimated force requirements to swiftly defeat the efforts and win decisively, a force requirement may be approximated. Additionally, this method might provide a hypothetical concept of operations to better develop the strategy.

A simplified example for developing force structure requirements follows: First, determine the number of aircraft carriers available for deployment, based on an 18 month deployment cycle. At any given time, three to four carriers are available for presence missions, three will be in the advanced stages of training and could be surged with some risk; three additional carriers are in the basic training phase or intermediate maintenance periods and might be surged with

significant risk of mission degradation; one is in overhaul; and one devoted to training. Therefore, the maximum for short notice surge capability in response to contingencies is seven to eight aircraft carriers.

Next, apply the 1-4-2-1 capability requirements from the “National Security Strategy of the United States” to determine the demand for aircraft carriers. For the first “1” and “4” requirements, apply one carrier to homeland defense and three to four conducting engagement or deterrence. For the swiftly defeat the efforts of two aggressors requirement, apply three carriers each based on historic precedent from Desert Storm and Operation Enduring Freedom. For the win decisively requirement, apply two additional carrier’s based on the Operation Iraqi Freedom model (two of these carriers would likely come from the engagement requirement with some risk). This demonstrates that nine to ten carriers would be required to support CSG’s (with moderate risk) for the requirements of the 1-4-2-1 National Military Strategy. This over-simplified example suggests that the Navy increase the number of available carriers to provide ten at any given time. This example suggests that the current force of 12 aircraft carriers would be insufficient to maintain an 18 month deployment rotation while supporting the 1-4-2-1 requirement. This shortfall was demonstrated during Operation Iraqi Freedom, when carrier deployment lengths extended well beyond this goal.

The third recommendation to enhance “Sea Power 21” is to develop a concept of operations using a warfighting scenario to develop a theoretical 1-4-2-1 contingency situation. Hypothetical situations posed against current (or envisioned) United States forces could be used for illustrative purposes to accomplish this. By doing so, the “Sea Power 21” would demonstrate the development of the joint warfighting concepts, including the joint interaction of all services. One solution to this issue is the development of a single military strategy document with separate, air, maritime, and land strategies which emphasizes joint operations.

Additional analysis such as the requirements for conducting maritime interdiction operations, counter-narcotics support, and escort operations would provide a more compelling argument to support the funding for procurement programs. This analysis would also be useful in determining the utility of the extremely large DD (X) which may be constrained in these ancillary missions due to its maneuverability and deep draft limitations. Additionally, the capabilities and limitations of the Littoral Combat Ship (LCS) in the open-ocean, against multi-mission tasks ought to be determined before this high cost program is executed. This analysis could easily result in a compelling argument for a small, high speed, multi-mission destroyer (in lieu of the costly LCS and DD (X)programs) to complement the existing high end cruiser and destroyer fleet.

CONCLUSION

The methodology provided by Alfred Thayer Mahan over 100 years ago remains an effective way to develop an effective maritime strategy. The best recent example of a maritime strategy that fully developed the ends, ways, means, and risks was the Cold War “Maritime Strategy.” Evaluation of “Sea Power 21” by Mahan’s standards suggests that the strategy is biased toward providing justification for future warfighting systems procurement and deficient in developing the concept of operations to the extent necessary for determining required force structure. The force structure outlined in “Sea Power 21” relies on high cost ships, operating in dispersed formations, which may fall short in providing adequate defense in depth. Additionally, force structure has no moderate cost, multi mission ships available to accomplish the many other required operations.

The deficiencies noted in “Sea Power 21” may be attributed to the shift from a threat-based approach to a capabilities-based study, because a threat based strategy is more conducive to evaluating the required means by matching friendly forces directly against the forces of the probable enemy. Despite this inherent difficulty the means could be more fully developed in a capabilities based strategy by developing a hypothetical concept of operations to describe the employment of the Navy in the joint war fighting strategy. Another approach is to develop combined military strategy with separate but interdependent land, maritime, and air strategies that would better reflect the joint concept of operations to support the vision for future warfighting operations.

“Sea Power 21” provides a visionary framework for naval operations, but more analysis should be conducted to determine the adequacy of force structure to ensure the Navy can adequately respond to littoral, blue water, and joint operational requirements.

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ENDNOTES

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